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CENTRALIZED BOOK ACQUISITION FOR NEW YORK STATE: PROPOSED COMPUTER SYSTEM, PART II: SYSTEM DESIGN.

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The logic of the system presented in this report is divided into five parts for computer processing and manipulation. They are: (1) incorporating publication information and Library of Congress catalog copy into the system, (2) processing of authority files and assignment of supplier, (3) preparing data for cataloging and acquisitions, (4) ordering, invoicing, and library billings and payment, and (5) producing reports, worksheets, orders, bills, and statements and checks. None of these parts are independent of the other; successive parts feed back recycling information to earlier logical units. Having only one input point and one output point in the system provides an advantage in minimizing operations complexity. The system is designed to make extensive use of bibliographic information received in machine readable form. The following information is provided in this volume about the computer operation of the cataloging system: (1) the flow chart of the computer runs and the associated input and output, (2) a narrative description of the functioning ofthe system, (3) the file content and record derivation specification for every data file, (4) the record content sheets for each record format used by the system, (5) the derivation of the output fields from the proper input fields, and (6) two sets of parameters which define options available to the user and options available within the system for each run. (CM)

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FOR NEW YORK STATE:
PROPOSED COMPUTER SYSTEM
PART II: SYSTEM DESIGN

SUBMITTED TO THE NEW YORK STATE LIBRARY
BY THEODORE STEIN

OCTOBER 1967

THE UNIVERSITY OF THE STATE OF NEW YORK
THE STATE EDUCATION DEPARTMENT
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U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

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THE UNIVERSITY OF THE STATE OF NEW YORK
THE STATE EDUCATION DEPARTMENT
THE NEW YORK STATE LIBRARY
ALBANY, NEW YORK 1967

ORGANIZATION OF THE SPECIFICATIONS

The system specifications consist of the following parts:

- System Definition
- Flow Chart
- Narrative Description
- File Content and Record Derivation
- Record Content
- Field Derivation
- Parameters

They are to be used as follows:

System Definition

The system definition should be read first in order to understand what the system is trying to accomplish. The remaining specification items explain in detail what processing is to be accomplished in each computer run. However, they do not explain the meaning of the various data elements, nor do they give the objectives of the various processing steps. In addition, there are a few cases in which certain of the specifications make specific reference to the system definition. This only occurs when a procedure given in the system definition contains all of the details required to completely define the steps which the computer program must take. In this case, instead of repeating the description reference is made to the system definition.

Flow Chart

The flow chart shows every computer run. It shows every input and output for each run and shows the flow of data between runs. In order to understand the system, it is necessary to use remaining documentation in connection with the flow chart.

Narrative Description

The narrative description is not a part of the formal specifications for this system. Everything in the narrative description is repeated elsewhere in more exact form, and nowhere is the narrative description complete enough to fully define any procedure. The purpose of the narrative description is only to give the reader a basic overall picture of the functioning of the system. The specifications are quite detailed and it can be difficult to build up the total picture from the details. It is much easier to examine the details if a general picture of the system functions is first obtained. As the narrative description is read, the flow chart should be followed.

File Content and Record Derivation

For every data file specified on the flow chart, one File Content and Record Derivation specification is prepared. This specification lists every record on the file and it states the conditions under which this record will be present in the output file. For each record a reference is given to a Record Content Sheet which will describe the contents of that record in detail.

Record Content Sheets

One of these sheets is prepared for each record format used by the system. If a number of different records use the same format then only one of these sheets will be prepared for all of the records, and in the file content listing these records will all be referred to this sheet.

Each data field present in the record is listed on this sheet. To the left of the data field an X is placed if that data field is always present in the record. An O is placed if the presence of the field is optional. To the right of the field an F or V is placed to denote fixed or variable length field.

Field Derivation

In certain cases a record is transcribed unchanged from input to output. In these cases the fact is noted on the file content sheet. In all other cases the way in which the output fields are obtained from the inputs must be given. This is done by means of field derivation sheets. One of these sheets is prepared for each record in the system for which such definitions are needed. For each field in the output record the specifications for obtaining it from the proper input fields is given. In many cases there are only a few fields in the record which need any lengthy specifications, and for the rest a simple statement is given that they are transcribed unchanged from the input. Note that this particular item of documentation is the item which contains all of the information necessary to work out the program logic.

Parameters

Two sets of parameters are defined. System parameters are to be defined by the user and may be incorporated into the programs since they will not normally be changed. Operating parameters must be entered for each running of the system to define certain system options (for example, running of the main Catalog Update).

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[illegible]

October 1967

MEMORANDUM

DIFFERENCES BETWEEN CATALOGING AND ACQUISITIONS SYSTEMS

1. Use of Bypass Tape Files

The flow charts for the Acquisitions System and the Cataloging System have the first eleven runs in common. However, slight differences exist in the two flow charts for these runs. It was thought worthwhile to indicate in the Acquisitions System places where certain records might bypass runs. Thus, in run 1 and run 6 a bypass tape is created. It should be noted that T1 plus T 1A and T 6 plus T 6A in the Acquisitions System flow chart are equivalent, respectively, to T1 and T 6 of the Cataloging System flow chart.

2. Change in Item Master File Status Code Structure

In the cataloging system the following status codes were used for a catalog record on the IMF:

0	Record in catalog
1	Addition in hold period
2	Addition derived from New Title Notices in hold period
3.	Addition derived from LC Copy in hold period
4	Deletion in hold period
5	LC Copy in alternate status.

It now appears desirable to add a source code and change the coding system as follows:

Status Code

0	Record in catalog
1	Addition in hold period
2	Deletion in hold period
3	Bibliographic Copy in alternate status

Source Code

0	Derived from catalog worksheet
1	Derived from LC Copy
2	Derived from Advance Publication Information
3	Derived from Special Requisition or Acquisition with new number
4	Derived from Item Master File Notice

Only records with source codes 0 or 1 would ever get status code 0.

For this reason, the File Content write-up for the Item Master File is particularly detailed.

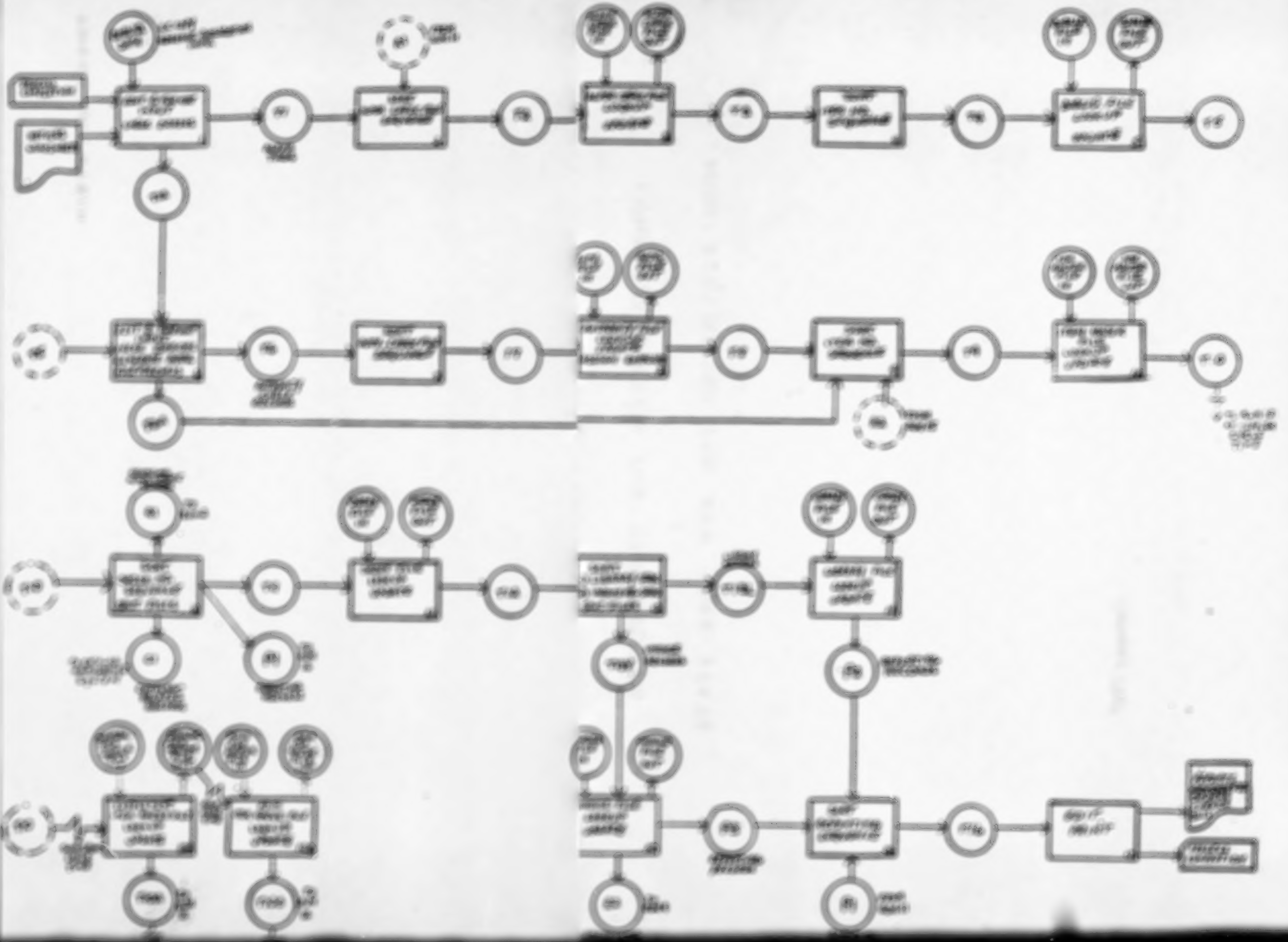
THEODOR STEIN

SYSTEM DESIGN

COMPUTER SYSTEM FOR CENTRALIZED BOOK ACQUISITION FOR NEW YORK STATE

October 1967

ACQUISITIONS SYSTEM



GENERAL DESCRIPTION OF THE SYSTEM

The Acquisition System has been designed as part of a large overall system which deals with both cataloging and acquisition inputs. Though this description is confined to the acquisition function, it is necessary at times to include catalog-related inputs, files, and outputs because of their close relationship to the acquisition function. The full detail of the cataloging portion of the system is defined in a separate document which has been submitted to the New York State Library.

The accompanying flow chart contains seventeen runs. The logic of the system may be divided into the following parts:

1. Incorporation into the system of Advanced Publication Information and Library of Congress Catalog Copy (runs 1-5).

2. Processing of the authority files and automatic assignment of supplier (runs 6-8).

3. Processing of the Item Master Files and preparation of data for cataloging and acquisitions (runs 9-11).

4. Ordering, invoicing and payment to supplier, and library billing and payments (runs 12-15).

5. Production of reports, worksheets, orders, bills and statements and checks (runs 16-17).

These parts are independent only in relation to their general function. Each logical unit is dependent upon preceding units and operates on data generated and/or prepared in previous parts. As will be shown in the following description, successive units feed back recycling information to earlier logical units.

A characteristic feature of the system is that there is only one input point and only one output point in the day-to-day running of the system. Input data is entered in run 1 even though it may not be operated upon until run 9, and printing records from early runs are carried through the system until the single exit point. While this slightly increases the run-time, it provides an advantage in minimizing operations complexity.

The system is designed to make extensive use of bibliographic information received in machine-readable form. Provision is made for maintaining files of Library of Congress Catalog Copy and advanced publication information. Access to these files is by item number and, where possible, by alphabetic matching.

The first five runs of the system provide the mechanism for retrieving LC copy and advanced publication information. There are several advantages in placing these runs in this early position in the system:

1. The system can initially be implemented without these runs.
2. This Bibliographic file subsystem may be run less frequently than the rest of the system by allowing the other inputs to enter at run 6.
3. The catalog copy received from LC and the advanced publication information need not be extensively operated upon until it is ready to be incorporated into the system.
4. When LC copy or advanced publication information is called for by item number, there is no delay in the data entering the system.

The first five runs are concerned with seven of the system inputs:

1. LC Copy
2. Advanced Publication Information
3. Acquisition Notice
4. Special Requisition Notice
5. Review Notice
6. Standing Order Notice
7. Completed Item Number Change Worksheet

Other inputs are carried forward or passed on to run 6 for editing, formatting, and error checking, after which they are acted upon in successive runs.

RUN 1

INPUT EDIT

The function of Run 1 is to edit, format, and execute an error check on advanced publication information, LC copy, Acquisition, Special Requisition, Review, and Standing Order Notices, and Completed Item Number Change Worksheets. Alpha tags are generated for the LC Copy, advanced publication information, and those Acquisition and Special Requisition Notices that have been entered with a preprinted New York Item Number (Type 2). The input run will not read in the alphabetic information entered on an Acquisition or Special Requisition Notice that contains a system item number (Type 1). It is assumed that by matching on item number, the necessary data can be retrieved from the Bibliographic or Item Master Files. Review and Standing Order Notices will be entered by Item Number only. Completed Item Number Change Worksheets are edited and an item number approval record and/or Item Number Change Records are generated for each worksheet.

It is felt that normally the alphabetic match will not require full author and title, and that an alpha tag can be constructed which will reduce the size of the alpha file to a minimum and yet provide a reasonable assurance of finding a unique match. In any event, all items matching alphabetically will be subject to a manual review (via the item number change worksheet) before being incorporated into the system. The question of how comprehensive the alpha tag must be can only be resolved with actual working experience. Initially, the tag for personal names may be defined as the first ten characters of the author's last name, followed by ten characters of the title. Characters from publisher and date would also be extracted if necessary.

Two files are produced in Run 1. T1 contains the alpha tag records to be sorted in Run 2 for the alpha check file lookup and update (Run 3), and the other seven records listed above to be carried forward for use in the Bibliographic File lookup and update (Run 5). All other records are written to T1A and passed on to Run 6.

RUN 2

ALPHA SORT

Run 2 sorts the alpha tag records to alpha check file sequence; i.e., alphabetically. In addition to T1, alpha tags are entered into the sort via R1 which is an output of run 11. These are recycled alpha records to change, delete, or add to the alpha check file. An explanation of these records is given in run 10.

All other records entered on T1 will not be sorted into any particular sequence, but will be placed after the alpha tag records.

RUN 3

ALPHA LOOKUP AND UPDATE

The input alpha tags are matched against the alpha check file. The inputs are either additions to the file from input or recycle, or are changes and deletions from the recycle.

The following conditions are possible:

Addition - match	Further action taken (see next paragraph)
Addition - no match	Add to file; print for inspection
Change - match	Change file
Change - no match	Should not occur - system error
Deletion - match	Delete from file
Deletion - no match	Should not occur - system error

On an addition - match, the following alternatives exist:

Input	File	Action Taken
LC Copy	LC Copy	LC input is added to the file. No further action is taken. It is presumed that LC will not make the error of cataloging one item under two numbers. Most certainly the match represents a coincidence because of the limitation of the alpha tag.
a. LC Copy	System record (except LC)	The input is added to the file. A request is generated to extract all matching system records from Bibliographic and/or Item Master File for printing on the Item Number Change Worksheets. Alpha match note records are generated listing all matching item numbers. For both the Bibliographic request and the alpha match note records, an arbitrary number is assigned to bring together the matching record information. Printing is always done once for each new input number.
b. Any alpha input (except LC)	Any system record (including LC) or any other input (including LC)	

RUN 4

ITEM NUMBER SORT

All records to be used in the Bibliographic File lookup and update are sorted to item number sequence:

1. LC Copy
2. Advanced publication information
3. Acquisition and Special Requisition Notices
4. Review Notice
5. Standing Order Notice
6. Item Number Approval and Item Number Change (generated from completed item number change worksheet).
7. Bibliographic Request (Type 2 - generated from match on alpha file).

The alpha match note records are carried through unsorted.

Within each item number, the records are sequenced by record identification. Those records that are used to update the Bibliographic File are before those records that extract data from the Bibliographic File.

RUN 5

BIBLIOGRAPHIC FILE LOOKUP AND UPDATE

The records sorted to item number sequence in Run 4 are passed against the Bibliographic File.

LC Copy and advanced publication information are added to the Bibliographic File, and records are deleted from the Bibliographic File according to the deletion conditions set down in the file content and record derivation sheet for the Bibliographic File. Also added to the Bibliographic File are those Special Requisition and Acquisition Notices (Type 2) which must await approval. Item number changes and approvals send their corresponding Special Requisition and Acquisition Notices forward to the Item Master File for processing.

Bibliographic copy records are generated for Special Requisition, Acquisition, Review, and Standing Order Notice matching records.

Item number change reminder records are generated according to the conditions set down on the file content and record derivation sheet for T5.

Alpha file delete records (to be recycled back to the alpha file after being carried forward to Run 11) are generated for those records deleted from the Bibliographic File as described in the file content and record derivation sheet for T5.

RUN 6

EDIT

Run 6 has two inputs, two general functions and two outputs. T5 which was generated in Run 5 and T1A containing all acquisition inputs not used in Runs 2-5 are entered into this edit run. The inputs are edited into standard format, error checks are executed, and the records are written to T6A, to be used in the Item Master File lookup and update. In addition, Run 6 extracts all established forms for the records and sets up heading check records to be used in Run 8 to check the correctness of the established forms, and to extract data about the established forms. These heading check records and authority file update records (see catalog system design) are written to T6 for the established form sort. T6A is passed on to Run 9.

RUN 7

ESTABLISHED FORM SORT

The heading check records and authority file update records are sorted to authority file number, established form (alphabetic) and record ID.

RUN 8

AUTHORITY FILE LOOKUP AND UPDATE

The main functions of Run 8 are associated with the cataloging system and are adequately described in the General Description of the Cataloging system. Briefly, the run accomplishes the following cataloging functions:

1. Authority files are updated with new information.
2. Established forms on inputs are validated.
3. Information about established forms is extracted.
4. LC Copy headings are transformed.
5. A change to an established form generates change records for all catalog entries containing the changed established form.

For the Acquisition System, the prime function of Run 8 is to automatically assign the correct supplier. Publisher authority records contain the supplier to be assigned unless a manually entered supplier has been inputted for the item. In all cases, manual assignment takes precedence.

RUN 9

ITEM NUMBER SORT

Run 9 sorts to item number sequence the heading records on T8, those records on T6A that are used in the Item Master File lookup and update, and the changed item number, Item Master File Supplement, processing material request, holdings and order count records on R2. Within item number, the records are sorted to record identification so that the file can be updated before information is extracted.

Those records not to be used in Run 10 are passed through unsorted.

RUN 10

ITEM MASTER FILE LOOKUP AND UPDATE

For both the catalog and acquisition function, Run 10 is the basic control run of the system. See the catalog system design for a full description of the role of Run 10 in cataloging.

In the Acquisition System the Item Master File contains the following records for each item:

1. Catalog Item Record

2. Item Information Record - contains ordering information for the various bindings.

3. Holding Record - indicates which libraries hold at least one copy of the item.

4. Cross-Reference Record - for changed item numbers and supplement file.

5. Input records - for those items whose inputs cannot be processed because the information is incomplete or because the item is on the supplement file.

6. Processing Materials Request Record - for those items on the supplement file, or those containing incomplete information.

The input that has been sorted to item number and record identification sequence is passed against the Item Master File. For each item, the file is first updated with changes, deletions, and additions. Alpha change records are then written to be recycled (on R1 from Run 11) back to the Alpha File. The catalog-related records are written to be passed on to the catalog maintenance system (out of Run 11 on C1). A Requisition Record is written for the input that is to generate an order. One Bibliographic Description Record is associated with each combination of order number and item number for which a Requisition Record is produced (order number is supplier code, preparation center code, cycle number, and two digits).

Records are also written to T10 for the following sets, worksheets and reports:

Standing Order Receiving Set
Requisition Worksheet
Requisition Guide
Item Information Worksheet
Item Number Error Report
Audit Report of Item Master File Changes
Status Report
Non-Processed Activity
Receiving Set (for Acquisition Notice)

All other inputs that were not used are carried forward unchanged on T10 to be used in subsequent runs.

RUNS 10A AND 10B

SUPPLEMENT AND MAIN ITEM MASTER FILE

As described for the cataloging system, the Item Master File is kept in three parts - current, supplement, and main. However, the phasing is not the same. In the catalog design the Supplement Item Master File was kept in phase with the supplement catalog and contained a record for each item in the supplement catalog; the Main Item Master File was kept in phase with the main catalog. For the

Acquisitions System an item is kept on the current file until it has been inactive for a pre-set time period (to be determined by actual experience) after which time it will be passed forward to the supplement. A criteria will be developed for passing items from the supplement to the main. There may then be cases where an item that is always active will never be removed from the Current Item Master File.

For the supplement cycle, Item Master File records, which have generated entries for the catalog supplement, are passed on to T10 for addition to the supplement Item Master File. In addition, if changes or requests come through for records which are no longer on the Current Item Master File but have been passed on to the supplement, these requests are held on the current until supplement cycle time and then passed forward to the supplement. These records will then be extracted from the supplement and recirculated through the system (via R2 to Run 10) so that the changes and requests can be processed. Thus, the supplement Item Master File run accomplishes two things: it makes new additions to the Supplement Item Master File and it extracts from the Supplement Item Master File those records for which activity is now present.

For the main cycle, additions to the Main Item Master File are passed forward from the supplement to the main, and changes or requests for main records are passed forward from the current to the supplement (at supplement cycle time) and to the main (at main cycle time) where the records are extracted and reentered into the system (via R2 and Run 10) so that changes and requests can be processed.

RUN 11

SORT AND SPLIT

The prime function of Run 11 is to sort the records to be used in the ordering process (Run 12) to order number and record identification.

Requisition Records and associated Bibliographic Record
Order Adjustment
Receiving Record
Invoice Notice Record
Supplier Description Record
Process Completion Record

The above records are written to T 11 along with unsorted invoicing and library-related records.

Reporting records are split out to file F1.
Catalog records are sorted to catalog sequence and split out to file C1.
Alpha change records are split out to file R1.

RUN 12

ORDER FILE LOOKUP AND UPDATE

The Order File contains for each supplier, a description of the supplier and order line records for outstanding orders. The inputs to update an order are first processed. Invoiced order lines are extracted and written to T12 for entry into Run 15. Order line records are extracted and written to T 12 for entry into Run 14. Orders and cancellations, receiving sets, shipping papers, and a report of items overdue from supplier are also written to T12. The invoicing and library-related records are carried forward to be sorted and split in Run 13. The same is true for the processing materials requests that are generated along with the receiving sets, order count, and holdings records. They are written to T12, to be carried forward to Run 15 and recycled back into the Item Master File run.

RUN 13

SORT AND SPLIT

The records that are to be used in the library run are sorted to library number sequence and written to T13L.

The records that are to be used in the invoicing run are sorted to invoice number sequence and written to T13V.

The process materials request, changed item number, and Item Master File supplement records (all to be recycled via R2 back to the Item Master File) are also written unsorted to T13V. The printing records, output of Run 12, are carried forward unsorted on T13V.

RUN 14

LIBRARY FILE LOOKUP AND UPDATE

The Library Master File contains for each library, a library description record, an account record including payment data (or budget data, where applicable) and order line records.

The Library File is first updated with payment (or budget) data and account adjustment information. The order line records are adjusted with new information. From the updated records the following records are written to File F2:

1. Library Description and Account Audit Register

2. Items Overdue at Library

3. Monthly Statement to Library

4. Monthly Statement to System Center and Branch Budget Report

5. Reconciliation Records

RUN 15

INVOICE FILE LOOKUP AND UPDATE

The Invoice Master File contains for each supplier, a supplier description record, an account record, invoice line records, and a voucher record.

The Invoice File is first updated with adjustments, new invoiced order lines, completed invoice worksheet records, and validated vouchers.

Invoice information and validated voucher records are written to R2 to be recycled back to the Order File (also included in R2 are the process material requests, order count, holdings, changed item number, and BIP supplement records).

New and changed invoiced worksheets, vouchers, checks and a check register and general ledger summary records are written to F3.

RUN 16

REPORTING SEQUENCE SORT

The files containing the reporting records - F1 out of Run 11, F2 out of Run 14, and F3 out of Run 15 - are brought together in Run 16, and the records are sorted to the appropriate sequence for each report. See the file content and record derivation sheets for the description of the reporting records and their sequence.

RUN 37

EDIT AND PRINT

Run 37 is a series of edit and print runs that produces the reports, worksheets, orders, checks, bills, and process completion cards.

FILE CONTENT AND RECORD DERIVATION

File Name: TRANSACTION FILE 1

File Sequence: INPUT SEQUENCE

FORMAT NO.	RECORD NAME	RECORD DERIVATION
LC	LC Copy Record	Transcribed from input. Destined for run 4.
PIB	Advance Publication Information Rec.	Transcribed from input. Destined for run 4.
[illegible]	Acquisition Notice, Type 2	For each Acquisition Notice which has a preprinted New York number, transcribed from input. Destined for run 4.
[illegible]	Special Acquisition Notice, Type 2	For each Special Acquisition Notice which has a preprinted New York number, transcribed from input. Destined for run 4.
[illegible]	Alpha Records	For each of the above four records an alpha tag is generated for checking against the Alpha File. Destined for run 2.
[illegible]	Acquisition Record, Type 1	For each Acquisition notice, type 1 (with system item number) transcribed from input. Destined for run 4.
[illegible]	Special Acquisition, Type 1	For each Special Acquisition Notice, Type 1, transcribed from input. Destined for run 4.
[illegible]	Review Notice	Transcribed from input. Destined for run 4.
[illegible]	Standing Order Notice	For each item number on a Standing Order Notice transcribed from input. Destined for run 4.
[illegible]	Item Number Change Record	a) One record for each change marked on an Item Number Change Worksheet. Destined for run 4. b) One record for each Item Number change on an Item Information Worksheet. Destined for run 4

TRANSACTION FILE 1 CONTINUED

FORMAT NO.	RECORD NAME	RECORD DERIVATION
		c) One record for each Item Number change on an Item Master File Notice. Destined for run 4.
106	Item Number Approval Record	a) One record for each approval marked on an Item Number Change Worksheet. Destined for run 4. b) One record for the "change to" Item Number on an Item Number Change Worksheet. Destined for run 4.

FILE CONTENT AND RECORD DERIVATION

File Name: TRANSACTION FILE 1A

File Sequence: INPUT SEQUENCE

FORMAT NO.	RECORD NAME	RECORD DERIVATION
1	Catalog Record	See catalog system design. Destined for run 6
4.	Authority Record	" " " " " "
2	Delete Record	" " " " " "
6	Special Request	" " " " " "
107	Item Master Information Record	a) One record for each Item Information Worksheet, transcribed from input. Destined for run 9. b) One record for each Item Master File Notice, transcribed from input. Destined for run 9.
108	Selection Record	One record for each Selection Worksheet, transcribed from input. Destined for run 9.
109	Requisition Record	a) One record for each Multiple Requisition, transcribed from input. Destined for run 9. b) One record for each Item Number entry on the completed Requisition Worksheet
110	Withdrawal Record	One record for each Withdrawal Notice, transcribed from input. Destined for run 9.
111	Order Adjustment Record	One record for each Order Adjustment Record, transcribed from input. Destined for run 11.
112	Receiving Record	One record for each Receiving Worksheet, transcribed from input. Destined for run 11.
113	Invoice Record	One record for each Invoice Notice, transcribed from input. Destined for run 11.

TRANSACTION FILE 1A CONTINUED

FORMAT NO.	RECORD NAME	RECORD DERIVATION
114	Invoice Worksheet Record	One record for each Invoice Worksheet transcribed from input. Destined for run 11.
115	Validated Voucher Record	One record for each Validated Voucher Worksheet, transcribed from input. Destined for run 11.
116	Supplier Description Record	One record for each Supplier Description Record, transcribed from input. Destined for run 11.
117	Supplier Account Adjustment Record	One record for each Adjustment to Supplier Account, transcribed from input. Destined for run 11.
118	Process Completion Record	One record for each Process Completion Record, transcribed from input. Destined for run 11.
119	Library Description Record	One record for each Library Description Notice, transcribed from input. Destined for run 13
120	Library Account Adjustment Record	One record for each Adjustment to Library or System Account, transcribed from input. Destined for run 13.
121	Library Payment Record	One record for each Library Payment, transcribed from input. Destined for run 13.
122	Library Budget Record	One record for each Budget Adjustment, transcribed from input. Destined for run 13.

SORT OUTPUT FILE CONTENT

File Name: TRANSACTION FILE 2

File Sequence: ALPHA TAG, ITEM NUMBER, RECORD TYPE

RECORDS SEQUENCED		RECORDS NOT SEQUENCED	
01	Alpha Records (T1)	LC	LC Copy (T1)
02	Alpha Check Records (R1)	PUB	Advance Publication Information Record (T1)
		101	Acquisition Notice, Types 1 and 2 (T1)
		102	Special Requisition Notice, Types 1 and 2 (T1)
		103	Review Notice (T1)
		104	Standing Order Notice (T1)
		106	Item Number Approval (T1)
		105	Item Number Change (T1)

FILE CONTENT AND RECORD DERIVATION

File Name: ALPHA CHECK FILE

File Sequence: ALPHABETIC ON ALPHA TAG FIELD - ALPHANUMERIC ON ITEM NUMBER

FORMAT NO.	RECORD NAME	RECORD DERIVATION
11	Alpha Check Record	a) One record for each Alpha Check record on the input Alpha Check file which does not meet the deletion condition given below. b) One record for each record on Transaction File 2 which is marked as an addition.

Deletion Condition

An Alpha Check Record is deleted from the input file if there is a matching Alpha Deletion Record on file T2.

FILE CONTENT AND RECORD DERIVATION

File Name: TRANSACTION FILE 3

File Sequence: NOT SEQUENCED

FORMAT NO.	RECORD NAME	RECORD DERIVATION
14	Bibliographic Request, Type 2	One record for each match in the Alpha Check run, except when the match was between two LC numbers.*
123	Alpha Match Note Record	One record for each Alpha tag match of input Alpha records with Alpha file records listing all matching item numbers. Input file item numbers are flagged.*
LC	LC Copy	Unchanged from Transaction File 2
PUB	Advance Publication Information Record	" " " "
101	Acquisition Notice, Types 1 and 2	" " " "
102	Special Requisition Notice Types 1 and 2	" " " "
103	Review Notice	" " " "
104	Standing Order Notice	" " " "
106	Item Number Approval	" " " "
105	Item Number Change	" " " "

* Note: An arbitrary number is attached to each record to bring together all matching record information for production of the Possible Item Number Change Worksheet.

SORT OUTPUT FILE CONTENT

File Name: TRANSACTION FILE 4

File Sequence: ITEM NUMBER, RECORD TYPE

RECORDS SEQUENCED

LC	LC Copy Record
PUB	Advance Publication Data
101	Acquisition Notice, Type 2
102	Special Requisition Notice, Type 2
102	Special Requisition Notice, Type 1
101	Acquisition Notice, Type 1
103	Review Notice
104	Standing Order Notice
106	Item Number Approval
105	Item Number Change
14	Bibliographic Request, type 5

RECORDS NOT SEQUENCED

123	Alpha Match Note Records

FILE CONTENT AND RECORD DERIVATION

File Name: BIBLIOGRAPHIC FILE

File Sequence: ITEM NUMBER, RECORD TYPE

FORMAT NO.	RECORD NAME	RECORD DERIVATION
LC, PUB	Bibliographic Record	a) One record for each unmatched LC Copy record on T4 b) One record for each unmatched Advance Publication Information on T4 c) One record for each unmatched Bibliographic record on the input Bibliographic file, unless deletion condition 1 is met.
102	Special Requisition Notice, Type 2	One record for each Special Requisition Notice, type 2, on the Bibliographic file which is awaiting item number approval unless deletion condition 2 is met.
103	Acquisition Notice, type 2	One record for each Acquisition Notice, type 2 on the Bibliographic file which is awaiting item number approval, unless deletion condition 2 is met.

Deletion Condition 1

a) Advanced Publication Information is matched by LC copy. LC copy is kept. Advanced Publication Information is dropped.

b) The value of the "date" the Bibliographic record entered the file plus system parameter P1 is greater than the current basic cycle number.

c) A matching Bibliographic request sends the copy to the [illegible]

Deletion Condition 2

A matching item number change or approval record sends the Special Requisition or Acquisition forward to the Item Master File.

FILE CONTENT AND RECORD DERIVATION

File Name: TRANSACTION FILE 5

File Sequence: NOT SEQUENCED

FORMAT NO.	RECORD NAME	RECORD DERIVATION
102	Special Requisition Record	a) One record unchanged for each Special Requisition Notice, type 1 on Transaction file 4 b) One record for each match of a Special Requisition type 2 on the Bibliographic file with an Item Number Approval. c) One record for each match of a Special Requisition type 2 on the Bibliographic File with an Item Number Change record. The record is sent forward under the "changed-to" number.
103	Acquisition Record	Same conditions as for Special Requisitions, above.
104	Standing Order Notice Records	Unchanged from Transaction File 4
105	Review Notice Records	" " " "
LC, PCB	Bibliographic Copy Records	One record for each of the above records which has matching Bibliographic Copy on the Bibliographic File.
108	Item Number Change Records	One record for each Item Number Change on T4 which did not find a matching Bibliographic record on the Bibliographic File under the "change from" item number.
18	Bibliographic Request Record, Type 2	One record for each Bibliographic Request, type 2 on T4 which did not find a matching Bibliographic record.
106	Bibliographic Copy Print Record	One record for each match of a Bibliographic Request type 2 with a Bibliographic record
107	Alpha Match Data Record	Unchanged from Transaction File 4

TRANSACTION FILE 5 CONTINUED

FORMAT NO.	RECORD NAME	RECORD DERIVATION
120	Possible Item Number Change Reminder Record	One record for each Acquisition or Special Acquisition record type 1, where the date plus the system parameter P3 is greater than basic cycle number.
3	Alpha File Delete Record	a) One record for each Bibliographic record deleted under delete condition 1 b), the Bibliographic records. b) One record under the "change-from" item number for each Item Number Change record applied in this

FILE CONTENT AND RECORD DERIVATION

File Name: TRANSACTION FILE 6

File Sequence: NOT SEQUENCED

FORMAT NO.	RECORD NAME	RECORD DERIVATION
[illegible]	Heading Check Record	a) One record for each established form on a Bibliographic Copy record from T5 b) One record for each established form on a Catalog record from T 19
[illegible]	Authority Update Record	See Catalog system design

FILE CONTENT AND RECORD DERIVATION

File Name: TRANSACTION FILE 6A

File Sequence: NOT REQUIRED

FORMAT NO.	RECORD NAME	RECORD DERIVATION
[illegible]	Special Requisition Record	Unchanged from TS. Destined for run 9
[illegible]	Acquisition Record	" " " " " "
[illegible]	Standing Order Record	" " " " " "
[illegible]	Review Record	" " " " " "
[illegible]	Bibliographic Request, Type 2	" " " " " "
[illegible]	Bibliographic Copy Data Record	" " " " " "
[illegible]	Alpha Match Data Record	" " " " " "
[illegible]	Possible Item Number Change Reminder Record	" " " " " "
[illegible]	Special Request	Unchanged from T 1 A. Destined for Run 9.
[illegible]	Item Master Information Record	" " " " " "
[illegible]	Selection Record	" " " " " "
[illegible]	Requisition Record	" " " " " "
[illegible]	Withdrawal Record	" " " " " "
[illegible]	Order Adjustment Record	Unchanged from T 1 A. Destined for Run 11.
[illegible]	Receiving Record	" " " " " "
[illegible]	Invoice Record	" " " " " "
[illegible]	Invoice Withdrawal Record	" " " " " "
[illegible]	Validated Voucher Record	" " " " " "

TRANSACTION FILE 6A CONTINUED

FORMAT NO.	RECORD NAME	RECORD DERIVATION
116	Supplier Description Record	Unchanged from T 1 A. Destined for run 11.
117	Supplier Account Adjustment Record	" " " " " "
118	Process Completion Record	" " " " " "
119	Library Description Record	" " " " " "
120	Library Account Adjustment Record	" " " " " "
121	Library Payment Record	" " " " " "
122	Library Budget Record	" " " " " "
18	Standard Catalog Record	a) One record for each catalog record on T 1A b) One record for each item number on delete record on T 1A c) One record for each bibliographic copy record on T5 d) One record for each item number change record on T5 Note: Edited into standard item master file format.

SORT OUTPUT FILE CONTENT

File Name: TRANSACTION FILE 7

File Sequence: AUTHORITY FILE NUMBER, ESTABLISHED FORM, RECORD TYPE

RECORDS SEQUENCED

2	Authority Update Records
20	Heading Records

FILE CONTENT AND RECORD DERIVATION

File Name: AUTHORITY CHECK FILE

File Sequence: AUTHORITY FILE, ESTABLISHED HEADING, RECORD TYPE

SEE CATALOG SYSTEM DESCRIPTION

FILE CONTENT AND RECORD DERIVATION

File Name: TRANSACTION FILE 9

File Sequence: NOT REQUIRED

FORMAT NO.	RECORD NAME	RECORD DERIVATION
[illegible]	Holding Record	One record for each holding check record on T7 Note 1: If holding check record matches a check file record, the holding record is updated. If no match occurs, the holding record is a copy of T7 record with error flag Note 2: Publisher Authority Records contain supplier number to be used unless a different supplier is manually inputted for an item.
[illegible]	Authority Updated Print Record	See Catalog System Description
[illegible]	Catalog Authority Entry Record	See Catalog System Description

SORT OUTPUT FILE CONTENT

File Name: TRANSACTION FILE 9

File Sequence on: ITEM NUMBER, RECORD ID (AS BELOW)

RECORDS REQUIRED

8 Standard Catalog Record (additions & Deletions)

26 Heading Record

27 [illegible] Supplement Record

27 Changed Item Number Record

103 Withdrawal Record

107 Item Master Information Record

108 Selection Worksheet Record

104 Standing Order Record

105 Review Record

4 Bibliographic Request, Type 2

10 Acquisition Record

109 Requisition Record

106 Special Requisition Record

6 Special Request Record

12 Holdings Update Record

14 Order Count Record

RECORDS NOT REQUIRED

22 Authority Update Print Record

23 Catalog Authority Entry Record

106 Bibliographic Copy Print Record

102 Alpha Match Item Record

11 Order Adjustment

12 Receiving Record

13 Invoice Record

14 Invoice Worksheet Record

15 Validated Voucher Record

16 Supplier Description Record

17 Supplier Account Adjustment Record

18 Process Completion Record

19 Library Description Record

20 Library Account Adjustment Record

21 Library Payment Record

22 Library Budget Record

8 Alpha File Delete Record

10 Invoice Information Record

100 Voucher Information Record

FILE CONTENT AND RECORD DERIVATION

File Name: ITEM MASTER FILE

File Sequence: ITEM NUMBER, RECORD TYPE

FORMAT NO.	RECORD TYPE	RECORD DERIVATION
[illegible]	Item Information Record	a) One record for each unmatched Item Information record on the input Item Master File, unless deleted under delete conditions [illegible]. b) One modified record for each Item Information record on the Item Master File which has a matching Item Master Information record on Transaction File [illegible]. c) One record is created when the following new item records enter the Item Master File: Standing Order Record Review Record Special Requisition Requisition The generated record is generally incomplete. Whenever a record is generated an entry is generated for the Item Information Worksheet so the Acquisitions Department may verify generated data (such as supplier) and provide any necessary additional information.
[illegible]	Catalog Item Record (Status [illegible])	d) One record for each Catalog Item record with status [illegible] on the input Item Master File unless the delete condition [illegible] is met. Delete Condition [illegible] a. There is a matching deletion and there are no holdings and there are no outstanding purchase orders. Change status code to [illegible].

ITEM MASTER FILE CONTINUED

FORMAT
NO. RECORD NAME RECORD DERIVATION

b. There is a matching change. Change status code to 5. Create modified record with status code 1.

c. There is an item number change. Change status code to 5. Recirculate record under new item number with status code 1. Create cross reference to new item number.

d. The value of the data field exceeds the value of Operation Parameter (1) by more than system parameter P8, and Operation Parameter (2) is zero, and there are no outstanding purchase orders. The record is sent to the Supplement Item Master File and a cross reference is created.

(3) One record for each Costing Item record with a status 1 which meets delete condition (B).

07 Costing Item Record (status 1)

(4) One modified record for each Costing Item record (status 1) which matches a Standard Costing record marked "change" on Transaction File 9.

(5) One record for each Costing Item Record created under delete conditions b., c., [illegible].

(6) One record for each unmatched Standard Costing record on Transaction File 9 marked as an addition and whose source code is zero or one.

(7) One record for each Costing Item record with a status one on the input Item Master File unless the delete condition 5 is met.

Delete Condition 5

a. There is a matching deletion and there are no [illegible] and there are no outstanding orders. Delete the record.

ITEM MASTER FILE CONTINUED

b. The value of the date field exceeds Operating Parameter ([illegible]) by more than system parameter ([illegible]). Status becomes zero and entries are generated for the catalog.

c. There is a matching Item Number change record. The record is reactivated under the new Item Number. A cross reference is created.

[illegible]	Catalog Item Record (Status [illegible])	a) One record for each Catalog Item record created under Update Conditions [illegible].

b) One record for each Catalog Item record on the input Item Master File unless delete condition [illegible] is met.

Delete Condition [illegible]

a. There is a matching Standard Catalog "change" record on Transaction File [illegible], and there is no Catalog Item record under this item number with a status [illegible]. The Catalog Item record is duplicated with a status of [illegible] and changes are applied to the status [illegible] record. The deletions the catalog are generated from the status [illegible] record and the status [illegible] record is deleted.

b. The value of the date field exceeds Operating Parameter ([illegible]) by more than system parameter ([illegible]).

c. There is a matching Item Number change record. The Catalog Item record is copied with the new Item Number and a status of [illegible] is the reactivated. Entries in the catalog are generated and the status [illegible] record is deleted.

[illegible]	Catalog Item Record (Status [illegible])	a) One record for each Standard Catalog record on Transaction File [illegible] which has as its source one of the following records:

1. LC Copy
2. Item Master Information Record
3. Advance Publication Data
4. Special Requisition or Acquisition with new item number (type [illegible])

ITEM MASTER FILE CONTINUED

FORMAT
NO. RECORD NAME RECORD DESCRIPTION

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible] [illegible] [illegible]

[illegible]

ITEM MASTER FILE CONTINUED

FORMAT NO.	RECORD NAME	RECORD DESCRIPTION
[illegible]	Item Number Cross Reference Record (Type 3)	a) [illegible] b) [illegible]

[illegible]

[illegible]	Suspended Record	Unchanged from Transaction File 3
[illegible]	Spec'l Request Record	" " " "
[illegible]	Requisition Record	" " " "
[illegible]	Spec'l Requisition Record	" " " "
[illegible]	Item Usage Record	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	Requisition Record	[illegible]
[illegible]	Item Record	[illegible]

FILE CONTENT AND RECORD IDENTIFICATION

File Name: TRANSACTION FILE [illegible]

File Sequence: NOT SEQUENCED

FORMAT NO.	RECORD NAME	RECORD IDENTIFICATION			
[illegible]	Alpha Word Run Record	Unchanged	from	Transaction	File [illegible]
[illegible]	Authority Update Code Record	"	"	"	"
[illegible]	Order Adjustment Record	"	"	"	"
[illegible]	Receiving Record	"	"	"	"
[illegible]	Invoice Record	"	"	"	"
[illegible]	Invoice Worksheet Record	"	"	"	"
[illegible]	Invoice Information Record	"	"	"	"
[illegible]	Validated Voucher Record	"	"	"	"
[illegible]	Voucher Information Record	"	"	"	"
[illegible]	Supplies Description Record	"	"	"	"
[illegible]	Adjustment to Supplies Account Record	"	"	"	"
[illegible]	Process Completion Record	"	"	"	"
[illegible]	Library Description Record	"	"	"	"
[illegible]	Adjustment to Library Account Record	"	"	"	"
[illegible]	Library Payment Record	"	"	"	"
[illegible]	Library Budget Record	"	"	"	"
[illegible]	Catalog Authority Query Record	"	"	"	"

TRANSACTION FILE 10

FORMAT NO.	RECORD NAME	RECORD DERIVATION
[illegible]	Standing Order Receiving List Record	One record for each Standing Order Notice Item Number which matches Bibliographic Copy on the Item Master File, for printing. If there is no matching Bibliographic Copy the number is ignored and libraries receiving the item must submit Acquisition Notice type 1.
[illegible]	Requisition Guide Record	One record for each Selection Notice entered by library systems which order using Multiple Requisition Worksheets.
[illegible]	Requisition Worksheet Record	One record for each Review Notice Item Number for which there is Bibliographic Copy on the Item Master File. If there is no matching Bibliographic Copy, the number is ignored and libraries who wish to order the item must use a special requisition, type 1.
[illegible]	Item Information Worksheet Record	a) One record for each new bibliographic record entering the system so the Acquisitions Department may review and complete the information on the Item Information record. b) One record for each Item Number on the Item Master File which has Requisition records that cannot be filled because of missing information on the Item Information record.
[illegible]	Bibliographic Copy Item Record	a) Unchanged from Transaction File 9 b) One record for each match of a Bibliographic Request, type 1, with a Catalog Item record on the Item Master File.
[illegible]	Alpha File Change Record	a) Unchanged from Transaction File 9 b) Two records for each Change to a Catalog Item Record which would affect the content of the Alpha record tag - one record a delete of the old tag and one record an addition of the new tag. c) One record for each deletion of a Catalog Item record.

TRANSACTION FILE 10 CONTINUED

FORMAT NO.	RECORD NAME	RECORD DERIVATION
		d) Two records for each Item Number Change - one a delete of the old Item Number and one an addition under the new Item Number.
137	Item Number Error Report Record	One record for each record containing a System Item Number which finds no match on either the Bibliographi or Item Master File.
138	Item Master File Audit Report Record	One record for each Item Master Record which was updated indicating the changes that were made.
139	Non-Processed Activity Report Record	One record for each input record which matched on Item Number but was rejected because it was in error (for example, invalid library number) or because of restrictions on ordering certain items.
141	Pseudo Order Generation Record	One record for each Acquisition record or Selection Notice on which it is indicated that the library will send the book to the preparation center for processing.
29	Catalog Entry Record	See cataloging system. Note: Status codes have been revised. Only records with status of 1 or 5 generate catalog entry records.
27	Changed Item Number Record	One record for each record deleted from the Item Maste File under delete conditions 1c, 2c, 3c, 4c.
141	Order Generation Records	N records for each Item Number for which Requisition records have been entered. The N records are generated as follows: Requisitions are segregated by Preparation Center (assigned from library number). For each Processing Center the number of an item ordered on a single Purchase Order must be less than or equal to System Parameter P 10. If the quantity ordered of a given item for a given Preparation Center is greater than P 10, the quantity is ordered on separate Orders each in quantity P 10. (Thus if p 10 = 200 and 700 of an

TRANSACTION FILE ID CONTINUED

FORMAT NO.	RECORD NAME	RECORD DERIVATION
		Item are ordered four Order Generation Records are produced: three for 200, one for 100). When the partitioning is made, there may be less than P ID items in the order since an order for a given library will not be split. (Thus if P ID = 200 and a quantity of 199 has been accumulated for an order and the next requisition calls for a quantity of 2 for a library, the Order for 199 will be generated and the two items will fall into the next order. A special order suffix must be generated for this situation to allow all orders of less than P ID and the first P ID lot to fall on the first set of Purchase Orders, and succeeding P ID lots to fall in succeeding sets of Purchase Orders. To illustrate if requisitioning was as follows:

Item	Quantity
A	100
B	250
C	400

and P ID was 200 the following split might be made:

P.O. 1

Item	Quantity
A	100
B	200
C	200

P.O. 2

B	50
C	200

27	Catalog Item Record	See Catalog system
14	Catalog Item Request Record	See Catalog System

TRANSACTION FILE B CONTINUED

Note: Several additional record types generate Required records. See File Content for the Item Master File.

FILE CONTENT AND RECORD DERIVATION

File Name: SUPPLEMENT ITEM MASTER FILE

File Sequence: ITEM NUMBER

GSS CATALOG SYSTEM

FILE CONTENT AND RECORD DESCRIPTION

File Name: TRANSACTION FILE (A)

File Sequence: ITEM NUMBER, INTERSPERSED [illegible] SEQUENCED RECORDS

[illegible] CATALOG SYSTEM

FILE CONTENT AND RECORD DESCRIPTION

File Name: [illegible]

File Sequence: [illegible]

[illegible]

FILE CONTENT AND RECORD DESCRIPTION

File Name: TRANSACTION FILE [illegible]

File Sequence: NOT SEQUENCED

[illegible] CATALOG SYSTEM

SORT OUTPUT FILE CONTENTS

Files: TRANSACTION FILE (1)
CATALOG FILE 1
PRINT FILE 1
RECYCLING FILE 1

Sequence: FILE TYPE, SORT TAG

Special Considerations

[illegible]

[illegible]

File Name: RECYCLING FILE 1

Sort Tag: NONE

Records: 11 Alpha File Change Record

File Name: PRINT FILE 1

Sort Tag: NONE

Records: 101 Alpha Match Data Records

97 Authority Update Print Record

103 Standing Order Receiving Set Record

104 Requisition Guide Record

105 Requisition Worksheet Record

106 Item Information Worksheet Record

[illegible] FILE – CONTINUED

[illegible] Bibliographic Copy/Item Record

[illegible] Save/Restore Errors Report Record

[illegible] Save/Restore File Audit Report Record

[illegible] Key Processor Activity Trace Record

File Name: CATALOG FILE [illegible]

Ext. Tag: [illegible] CATALOGING SYSTEM [illegible]

Records:

[illegible] Heading Authority Entry Record

[illegible] Heading Entry Record

Name: TRANSACTION FILE 1

Key: SUPPLIER, ORDER NUMBER, ITEM NUMBER

RECORDS STORED

[illegible] Order Commitment Record

[illegible] [illegible] Record

[illegible] [illegible]

[illegible] [illegible] Information Record

[illegible] [illegible] Information Record

[illegible] [illegible] Description Record

[illegible] [illegible] Completion Record

[illegible] [illegible] Record

[illegible] [illegible] [illegible] Record

RECORDS NOT REQUIRED

[illegible] Invoice Validation Record

[illegible] Validated Voucher Record

[illegible] Adjustment to Supplier Account Record

[illegible] Library Description Record

[illegible] Adjustment to Library Account Record

[illegible] Library Payment Record

[illegible] Library Budget Record

[illegible] Changed Item Number Record

[illegible] [illegible] [illegible] Item Record

[illegible] [illegible] [illegible] Record

FILE CONTENT AND RECORD DERIVATION

File Name: ORDER FILE

File Sequence: SUPPLIER NUMBER, ORDER NUMBER, ITEM NUMBER

SUMMARY NO.	RECORD NAME	RECORD DERIVATION
(1)	Supplier Description Record	a) One record for each unmatched Supplier Description Record addition on Transaction File (1). b) One record for each unmatched Supplier Description Record on the Input Order File. c) One altered record for each match of a Supplier Description Record on the Order File with a Supplier Description record on Transaction File (1) encoded as a change. Note: A Supplier Description record on Transaction File (1) encoded as a delete causes removal of the Order Master File record only if there are no outstanding Order Line records on the file.
(2)	Order Line Records	a) One record for each record on the Input Order File for which no matching records were entered from Transaction File (1), unless the following end-of-line conditions were met: 1. An order adjustment has reduced the quantity ordered to zero. 2. The order for a particular item has been received, invoiced, vouchered, processed and shipped to the Library and Operating Personnel [illegible]. b) One modified record for each match of the Order Line Record with the following records on Transaction File (1): Order Adjustment Receiving Record Invoice Information Record Voucher Information Record Process Completion Record

ORDER FILE CONTINUED

FORMAT
NO. RECORD NAME

RECORD DERIVATION

a) One record for each Order Generation Record on Transaction File 11.

Note: The same Order Number is assigned to each P.O. Order Generation record to limit the number of lines on a single Purchase Order. Purchase Order numbers will be generated containing Operating Parameter C 1 and a sequential suffix beginning with one.

(4) Open Order Line Record

a) One record for each record on Transaction File 11

b) One record for each record on the Input Order Master File unless the record is matched by a Process Completion Record.

FILE CONTENT AND RECORD DERIVATION

File Name: TRANSACTION FILE 12

File Sequence: NOT SEQUENCED

FORMAT NO.	RECORD NAME	RECORD DERIVATION
143	Purchase Order Record	One record for each Order Line record added to the Order File.
140	Receiving Set Record	a) Unchanged from Transaction File 11. b) One record for each Order Line Record added to the Order File. c) One record for each Order Line Record changed by an Order Adjustment Record or Receiving Record (partial) d) One record for each Order Line Record deleted from the Order File with an indication that it is a cancellation.
144	Cancellation Letter Print Record	One record for each Order Line changed because of an Order Adjustment Record, which reduces the quantity ordered and calls for the Cancellation Letter.
127	Processing Materials Request Record	a) One record for each Library on an Order Line Record added to the Order File. For recirculation to the Item Master File. b) One record for each Library order cancelled on an Order Line Record, marked as a deletion, for recirculation to the Item Master File. This record will not be effected if the previously generated request has already been filled.
129	Holdings Update Record	One record for each Library Item for which a Process Completion Record has been received.

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TRANSACTION FILE 12 CONTINUED

FORMAT NO.	RECORD NAME	RECORD DERIVATION
130	Order Count Record	a) One record for each Order Line added to the Order file, with a count of + 1. b) One record for each Order Line record deleted from the Order File, with a count of - 1. Note: These records are recirculated by item number to the Item Master File to keep track of the number of outstanding orders.
145	Shipping Papers Record	One record for each Library Order Line for which a Process Completion Record has been received.
146	Overdue Order Report Record	When Operating Parameter C8 is non-zero any Order Line Record whose date exceeds C1 by more than system parameter P 11 is extracted for a report.
116	Supplier Description Record	One record for each added or modified Supplier Descripti Record on the Order File, to be passed forward to the Invoice File.
112	Receiving (Invoice) Record	One record for each update of an invoiced Order Line Record by a Receiving Worksheet, sent forward to the Invoice File.
147	Order Information (Library) Record	a) One record for each Library on anOrder Line Record added to file. b) One record for each Library on an Order Line record updated by an approved invoice. c) One record for each Library on an Order Line Record for which an order was cancelled.
113	Invoice Record	One record for each input Invoice Record containing either Order Line information or an indication that the Order Number - Item Number is in error.
117	Adjustment to Supplier Account Record	Unchanged from Transaction File 11
114	Invoice Worksheet Record	" " " "

TRANSACTION FILE 12 CONTINUED

FORMAT NO.	RECORD NAME	RECORD DERIVATION
115	Validated Voucher Record	Unchanged from Transaction File 11
119	Library Description Record	" " " "
120	Adjustment to Library Account Record	" " " "
121	Library Payment Record	" " " "
122	Library Budget Record	" " " "
27	Changed Item Number Record	" " " "
27	Reentering Catalog Item Record	"
152	Reconciliation Report Order Record	One record for each Order Line Record where voucher flag exists or billing has been done.

SORT OUTPUT FILE CONTENT

File Name: TRANSACTION FILE 13V

File Sequence: SUPPLIER NUMBER, RECORD TYPE, INVOICE/VOUCHER NUMBER

RECORDS SEQUENCED

116	Supplier Description Record
112	Receiving (Invoice) Record
113	Invoice Record
114	Invoice Worksheet Record
115	Validated Voucher Record
117	Adjustment to Supplier Account Record

RECORDS NOT SEQUENCED

143	Purchase Order Record
140	Receiving Set Record
144	Cancellation Letter Print Record
127	Processing Materials Request Record
129	Holdings Update Record
130	Order Count Record
145	Overdue Order Report Record
27	Changed Item Number Record
27	Reentering Catalog Item Record
152	Reconciliation Report Order Record

FILE CONTENT AND RECORD DERIVATION

File Name: INVOICE MASTER

File Sequence: SUPPLIER, RECORD TYPE, INVOICE NUMBER, VOUCHER NUMBER

FORMAT NO.	RECORD NAME	RECORD DERIVATION
116	**Supplier Description Record**	a) One record for each unmatched Supplier Description Record on the input Invoice File or Transaction File 13V. b) One match for each match of Supplier Description Records taken from Transaction File 13V, if the record on T 13V was an addition.
115	Voucher Record	Completely approved Vouchers will be read into memory for checking against Invoice Master Records. System Parameter P 14 defines the number of records which may be held in memory for a given supplier. The excess will be held on the Master File for processing in the next running of the file. The parameter should be defined so that this option is rarely used, else there is a danger that the number of voucher records held will constantly increase.
148	Invoice Master Record	a) One record for each unmatched Invoice Master Record on the input Invoice Master File, unless deletion condition is met. b) One record for each unmatched Invoice Record on Transaction File 13V c) One modified record for each Invoice Master matched by the following records: Invoice Worksheet Record Invoice Record Validated Voucher Record Receiving (Invoice) Record d) One modified record for each approved Invoice Master Record when Operating Parameter C9 is non-zero. A Voucher Number is assigned.

INVOICE MASTER FILE CONTINUED

FORMAT NO.	RECORD NAME	RECORD DERIVATION
		Delete Condition: An Invoice Master Record or Supplier Adjustment Record is deleted when the following conditions exist: a. Operating Parameter C12 is non-zero b. The record has been vouchered c. The Voucher has been validated d. The Voucher has been paid
117	Supplier Account Adjustment Record	a) One record for each Input Supplier Account Adjustment on Transaction File 13V b) One modified record when Operating Parameter C9 is non-zero. A Voucher Number is assigned. c) One modified record for each matching Validated Voucher Record. d) One record for each record on input Invoice Master File unless deletion conditions above exist.
149	Supplier Account Record	a) A Supplier Account Record is created when a Supplier Description Record is created. b) A Supplier Account Record is modified each time a Voucher is paid to reflect the total amount paid to the Supplier.

FILE CONTENT AND RECORD DERIVATION

File Name: RECYCLING FILE 2

File Sequence: NOT SEQUENCED

FORMAT NO.	RECORD NAME	RECORD DERIVATION
27	Changed Item Number Record	Unchanged from Transaction File 13V
27	Reentering Catalog Item Record	" " " "
130	Order Count Record	" " " "
129	Holdings Update Record	" " " "
127	Processing Materials Request Records	" " " "
131	Invoice Information Record	One record for each Order Number - Item Number on an approved Invoice Master Record, for recirculation of price information to the Order File.
132	Voucher Information Record	One record for each Order Number - Item Number on an Invoice Master Record when the record has been updated by a Validated Voucher Record.

FILE CONTENT AND RECORD DERIVATION

File Name: PRINT FILE 3

File Sequence: NOT SEQUENCED

FORMAT NO.	RECORD NAME	RECORD DERIVATION
143	Purchase Order Record	Unchanged from Transaction File 13V
140	Receiving Set Record	" " " " "
152	Reconciliation Report Order Record	" " " " "
144	Cancellation Letter Print Record	" " " " "
145	Overdue Order Report Record	" " " " "
148	Invoice Worksheet Record	a) One record for each Invoice Master added to the Invoice Master File. b) One record for each Invoice Master Record which has been updated.
115	Voucher Record	One record for each approved Invoice Master Record or Supplier Account Adjustment Record showing price and record number. Generated when Operating Parameter C is non-zero.
150	Check to Supplier Record	When Operating Parameter C 10 is non-zero vouchered records which have been validated are sent forward to be printed and for preparation of a check to the supplier.
153	Reconciliation Report Payments Record	When Operating Parameter C12 is non-zero totals are generated by supplier for those Invoices and Adjustment which have been validly vouchered and/or paid.

SORT OUTPUT FILE CONTENT

File Name: TRANSACTION FILE 13 L

File Sequence: LIBRARY NUMBER, ORDER NUMBER, ITEM NUMBER, RECORD TYPE

RECORDS SEQUENCED

119	Library Description Record
145	Shipping Papers Record
147	Order Information (Library) Record
120	Adjustment to Library Account Record
121	Library Payment Record
122	Library Budget Record

FILE CONTENT AND RECORD DERIVATION

File Name: LIBRARY MASTER FILE

File Sequence: LIBRARY NUMBER, RECORD TYPE, ORDER NUMBER, ITEM NUMBER

FORMAT NO.	RECORD NAME	RECORD DERIVATION
119	Library Description Record	a) One record for each unmatched Library Description Record on the input Library Master File. b) One record for each unmatched Library Description Record on Transaction File 13L which is marked as an addition. c) One modified record for each match of input and Master File records if the input is marked as a change. Note: A record is deleted if the following conditions are met: a. The input Library Description Record is marked as as a deletion, and, b. There are no other records for this Library except a Library Account record with a zero balance.
150	Library Order Records	a) One record for each new Order Information (Library) Record on Transaction File 13L. b) One record for each unmatched Library Order Record on the input Library Master File unless delete condition 1 is met. c) One altered record for each match of an Order Information (Library) record or a Shipping Papers Record with a Library Order Record unless delete condition 2 is met. Delete Condition 1 When Operating Parameter C 11 is non-zero the Library Order records which represent items that were received

LIBRARY MASTER FILE CONTINUED

FORMAT NO.	RECORD NAME	RECORD DERIVATION
		processed, and invoiced are billed to the Library and deleted from file. Delete Condition 2 The input Order Information (Library) Record is marked as a delete. Deletes are generated in the Order File run and all necessary processing to effect returns or credits for items is done in that run.
120	Library Account Adjustment Record	a) One record for each Library Account Adjustment on the input Library Master File. b) One record for each new Adjustment to Library Account Record entered from Transaction File 13L.
151	Library Account Record	One record for each record on the input Library Master File adjusted under two conditions: 1. When there is a matching Library Payment Record 2. When Operating Parameter C 11 is non-zero.
122	Library Budget Record	a) One record for each unmatched Library Budget Record on the input Library Master File. b) One record for each unmatched Library Budget Record on Transaction File 13L marked as an addition. c) One modified record for each match of master file record with an input marked as a change.

FILE CONTENT AND RECORD DERIVATION

File Name: PRINT FILE 2

File Sequence: NOT SEQUENCED

FORMAT NO.	RECORD NAME	RECORD DERIVATION
150, 151	Library Billing Record	When Operating Parameter C 11 is non-zero the following records on the Library Master File are extracted: 1. Library Order records which fulfill delete condition for those records. 2. Library Account records showing previous month balance, payments, and new monthly balance.
154	Reconciliation Report Billing Record	When Operating Parameter C12 is non-zero totals are generated by library for those amounts billed or billable.

RECORD CONTENT SHEET NO.101

Record: ACQUISITION RECORD **File:** T1 - T4
BIBLIO
T5, T6A
ITEM MASTER

Type 1:

X	Record ID	F
X	System Item Number	F
X	Library Number	F
X	Sent to Preparation Center	F

Type 2:

X	Record ID	F
X	Preprinted Item Number	F
X	Library Number	F
X	Sent to Preparation Center	F
X	Bibliographic Description	V

RECORD CONTENT SHEET NO.102

Record: SPECIAL REQUISITION File: T1 - T4
BIBLIO
T5, T6A, T9
ITEM MASTER

Type 1

X	Record ID	F
X	System Item Number	F
X	Binding Code	F
X	Library Code	F
X	Number of Copies	F

Type 2

X	Record ID	F
X	Preprinted Item Number	F
X	Binding Code	F
X	Library Code	F
X	Number of Copies	F
X	Bibliographic Description	V

RECORD CONTENT SHEET NO.103

Record **REVIEW RECORD** File: T1 - T6A, T9

X	Record ID	F
X	Item Number	F
X	Journal Code	F
O	Issue	V

RECORD CONTENT SHEET NO.104

Record: STANDING ORDER RECORD File: T1 - T6A, T9

X	Record ID	F
X	Item Number	F
X	Source Code	F
X	Distribution Plan Code	F

RECORD CONTENT SHEET NO.105

Record: ITEM NUMBER CHANGE RECORD File: T1-T5

X	Record ID	F
X	Change-From Item Number	F
X	Change-To Item Number	F

RECORD CONTENT SHEET NO.106

Record: ITEM NUMBER APPROVAL RECORD **File:** T1 T4

X	Record ID	F
X	Item Number	F

RECORD CONTENT SHEET NO. 107

Record: ITEM MASTER INFORMATION RECORD File: T1A, T6A, T9

X	Record ID	F	
X	Item Number	F	
O	Systems Selecting*	F	
O	Supplier*	F	
X	Binding	F	
O	Field Changed	F	) Repeat for each change
O	Field	V	)

*These fields are blank if no change is made on the Item Information Worksheet.

RECORD CONTENT SHEET NO.108

Record: SELECTION RECORD **File: T1A, T6A, T9**

X	Record ID	F
X	Item Number	F
X	Binding	F
X	System Code	F
X	Approval Code	F
X	Acquisition Code	F
X	Sent to Preparation Center	F

RECORD CONTENT SHEET NO.109

Record: **REQUISITION RECORD** **File:** **T1A, T6A, T9**

X	Record ID	F	
X	Item Number	F	
X	Binding Code	F	
X	Library Number	F	) Repeat for each Library on Multiple
X	Number of Copies	F	) Requisition

RECORD CONTENT SHEET NO.110

Record: WITHDRAWAL RECORD **File: T1A, T6A, T9**

X	Record ID	F
X	Item Number	F
X	Library Number	F

RECORD CONTENT SHEET NO.111

Record: ORDER ADJUSTMENT RECORD File: T1A, T6A, T9, T10, T11

X	Record ID	F
X	Supplier Number	F
X	Order Number	F
X	Item Number	F
X	Binding Code	F
X	Library Code	F
O*	Change Quantity Ordered by Amount	F
O	Change Quantity Received by Amount	F
O	Change Quantity Processed by Amount	F
O	Cancel Quantity	F
O	Return Quantity	F

*Note: Any one or a combination of the quantity fields must be present.

RECORD CONTENT SHEET NO.112

Record: RECEIVING RECORD File: T1A, T6A, T9, T10, T11

X	Supplier Number	F	
X	Order Number	F	
X	Item Number	F	
X	Binding Code	F	
O	Library Code	F	) Repeat if Necessary
O*	Quantity Received	F	)
O	Complete Order Unavailable	F	
O	Complete Order	F	

*Note: Either the quantity received or complete order field must be present.

RECORD CONTENT SHEET NO.113

Record: INVOICE RECORD File: T1A, T6A, T9 - T13V

To be checked against the Order Master File:

X	Supplier Number	F
X	Invoice Number	F
X	Order Number	F
X	Item Number	F
X	Binding Code	F
X	Quantity Invoiced	F
X	Unit Price	F
X	Total	F

When the Invoice Record finds a matching Order Line Record the following fields are extracted:

X	Bibliographic Description	V
X	Order Line Data	V

To bypass the Order File:

X	Supplier Number	F
X	Invoice Number	F
X	Order Number	F
X	Charge/Credit Code	F
X	Separator	F
X	Percentage	F
X	Total	F

RECORD CONTENT SHEET NO.114

Record: COMPLETED INVOICE WORKSHEET RECORD File: T1A, T6A
T9 - T13V

X	Record ID	F
X	Supplier Number	F
X	Invoice Number	F
X	Order Number	F
X	Action Code **	F
O	Original Invoice Line *	F
O	Modified Invoice Line *	F

* The following fields are contained in the Invoice Line:

Item Number	or	Charge/Credit Code
Binding Code		Separator
Quantity Invoiced		Percentage
Unit Price		

** Action Code

Approved
Reject
Change

RECORD CONTENT SHEET NO.115

Record: VALIDATED VOUCHER File: T1A, T6A, T9 - T13V

Original Input:

X	Record ID	F	
X	Supplier Number	F	
O	Total Voucher Valid Code	F	
O	Invoice Number	F	) Repeat
O	Invoice Valid Code	F	)
O	Supplier Account Adjustment Number	F	) Repeat
O	Adjustment Valid Code	F	)

Edited:

Type 1:

X	Record ID	F
X	Supplier Number	F
X	Voucher Number	F
X	Validity Code	F

Type 2:

X	Record ID	F
X	Supplier Number	F
X	Invoice/Supplier Account Adjustment Number	F
X	Validity Code	F
X	Voucher Number	F

RECORD CONTENT SHEET NO.116

Record: SUPPLIER DESCRIPTION RECORD File: T1A, T6A, T9,- T12
ORDER MASTER
T 13 V
INVOICE MASTER

X	Record ID	F
X	Supplier Code	F
X	Supplier Name	V
X	Supplier Address	V
O	Delay Time	F

RECORD CONTENT SHEET NO.117

Record: ADJUSTMENT TO SUPPLIER ACCOUNT RECORD
File: T1A, T6A, T9 - T13V, INVOICE MASTER

X	Record ID	F
X	Supplier Code	F
X	Adjustment Number	F
X	Amount	F
X	Description	V

On the Invoice Master the following fields are added:

X	Voucher Number*	F
X	Validity Code	F

* Field is blank until a voucher number is assigned.

RECORD CONTENT SHEET NO.118

Record: PROCESS COMPLETION RECORD **File:** T1A, T6A, T9-T11

X	Record ID	F
X	Order Number	F
X	Item Number	F
X	Binding Code	F
X	Receiving Set Suffix	F

RECORD CONTENT SHEET NO.119

Record: LIBRARY DESCRIPTION File: T1A, T6A, T9-T13L
LIBRARY MASTER

X	Record ID	F
X	Library Number*	F
X	Library Name	V
X	Library Address	V

*Library number consists of subfields which define library system, processing center, library.

RECORD CONTENT SHEET NO.120

Record: ADJUSTMENT TO LIBRARY ACCOUNT RECORD **File:** T1A, T6A, T9-T13L LIBRARY MASTER

X	Record ID	F
X	Library Code	F
X	Adjustment Number	F
X	Amount	F
X	Description	V

RECORD CONTENT SHEET NO.121

Record: LIBRARY PAYMENT RECORD File: T1A, T6A, T9-T13L
LIBRARY MASTER

X	Record ID	F
X	Library Code	F
X	Payment Number	F
X	Amount	F

RECORD CONTENT SHEET NO.122

Record: LIBRARY BUDGET RECORD **File:** T1A, T6A, T9-T13L
LIBRARY MASTER

X	Record ID	F
X	Library Number	F
X	Budget Period	F
X	Budget Amount	F

RECORD CONTENT SHEET NO.123

Record: ALPHA MATCH NOTE RECORD File: T3

X	Record ID	F	
X	Match Number*	F	
X	Item Number	F)	Repeated for all matching item numbers
X	Input Item Indicator	F)	

* An arbitrary sequential match number is assigned to the Alpha Match Note Record and Bibliographic Copy Request Records so that bibliographic copy print records extracted by the requests may be properly sequenced for the possible item number change worksheet.

RECORD CONTENT SHEET NO.124

Record: BIBLIOGRAPHIC COPY PRINT RECORD File: T5 - T10
P 1

X	Record ID	F
X	Match Number	F
X	Item Number	F
X	Bibliographic Data as maintained on the Biblio File or Item Master File	V

RECORD CONTENT SHEET NO.125

Record: POSSIBLE ITEM NUMBER CHANGE REMINDER RECORD **File:** T5, T6A, T9, T10 P 1

X	Record ID	F
X	Date Entered into system	F
X	Copy of Acquisition or Special Requisition Record Type 2	V

RECORD CONTENT SHEET NO.126

Record: HOLDINGS RECORD **File:** ITEM MASTER

X	Record ID	F		
X	Item Number	F		
X	Library Code*	F	)	Repeated for each library
X	Indication if held	F	)	

*Note: The library code and holding indication for all libraries can be represented by assigning each library a fixed position in a string of bits, and setting the bit whenever the item is held at the associated library.

RECORD CONTENT SHEET NO. 127

Record: PROCESSING MATERIALS REQUEST RECORD **File:** T12, T13V
R2
T 9
ITEM MASTER

X	Record ID	F
X	Item Number	F
X	Order Number	F
X	Library Code	F
X	Number of Copies	F

RECORD CONTENT SHEET NO.129

Record: ITEM MASTER INFORMATION RECORD File: ITEM MASTER

X	Item Number	F		
X	Record ID	F		
X	Bibliographic Data	V		
X	Number of Orders Outstanding	F		
X	Systems Selecting **	F		
X	Supplier Code	F		
O	Binding	F	)	Repeat for each binding
O	Binding Description ***	V	)	
O	Prepublication Price*	F	)	
O	Publication Date*	F	)	
X	Price	F	)	
O	Miscellaneous Codes +	V	)	

+ Among Miscellaneous Codes are a flag for out-of-print conditions and a flag for those items where the anticipated delay before receipt is greater than System Parameter P11. When the latter flag is on the delay time is given.

* While provision is made in this record for these fields they may be blank.

** This field is necessary for checking the validity of orders from consolidated library systems where member libraries may be restricted from ordering items not approved by system centers.

*** The majority of binding types will be described by binding codes. Where an unusual binding may be coded with a general code such as "SP" and the description of the binding will be held.

FIELD DERIVATION

File Name: ITEM MASTER Record Name: ITEM MASTER INFORMATION RECORD

Content Sheet No.128

Item Number

Transcribed from one of the following records which may cause creation of an Item Information Record:

a) Standing Order Record
b) Review Record
c) Special Requisition Record
d) Acquisition Record

Bibliographic Data

For records a) and b) above Bibliographic records must be present for the record to be acceptable. The Bibliographic Record is then the source of these fields. For records c) and d) these fields are extracted from Bibliographic Copy if they are valid type 1 records. If they are type 2 records, they must contain this information. The following information is held if known: Author, Title, Publisher, Date and Place of Publication, Edition.

Number of Orders Outstanding

This field is originally zero. It is incremented and decremented by recycling Order Count Records. A negative count in this field is a System Error.

Systems Selecting

A series of flags are set up representing those libraries systems who restrict ordering by member libraries to those items selected by the System Center. Any member Library Requisition for an item not approved by the library's System Center will be rejected. This field is updated by Selection Records from the appropriate System Centers.

Supplier Code

Wherever possible, the Supplier Code will be assigned by searching the Authority File for Publishers. Where no supplier is assigned to a publisher, or where the State Center chooses to change supplier, a completed Item Information Worksheet may be entered changing this field.

Binding, Binding Description, Prepublication Price, Publication Date, Price

It is assumed that this information will be entered by the State Center via a completed Item Information Worksheet. It may be possible, however, to extract some or all of this information from Bibliographic Records derived from Advance Publication Data.

Provision should be made for establishing Binding Codes for common types of Bindings. Where an unusual Binding exists a code indicating that it is a special binding is followed by a description of the unique binding type.

Miscellaneous Codes

No decision has been made on the contents of these fields. Certain codes seem advisable. A flag may be present to indicate that the item (or one binding of an item) is out-of-print or requires a longer delivery time. If used, these codes will be inputted on the completed Item Information Worksheet.

RECORD CONTENT SHEET NO.129

Record: HOLDINGS UPDATE RECORD File: T12, T13V
R2
T9

X	Record ID	F
X	Item Number	F
X	Library Code	F

Note: The Withdrawal Record is used to remove a holding indication from the Master File.

RECORD CONTENT SHEET NO.130

Record: ORDER COUNT RECORD File: T12, T13V
R2
T9

X	Record ID	F
X	Item Number	F
X	Count*	F

* A record with a count of +1 is generated in the Order Master File run for each Order Line Record.

A record with a count of - 1 is generated each time an Order Line is deleted, either by fulfillment or cancellation of the Order Line.

RECORD CONTENT SHEET NO.131

Record: INVOICE INFORMATION RECORD File: R2
T9, T10, T11

X	Record ID	F
X	Order Number	F
X	Item Number	F
X	Binding Code	F
X	Invoice Number	F
X	Record Type*	F
O	Quantity Ordered	F
O	Unit Price	F

* Record type may be addition, change, deletion

RECORD CONTENT SHEET NO.132

Record: VOUCHER INFORMATION RECORD File: R2
T9, T10, T11

X	Record ID	F
X	Order Number	F
X	Invoice Number	F

RECORD CONTENT SHEET NO.133

Record: STANDING ORDER RECEIVING SET RECORD File: T10
P1

X	Record ID	F		
X	Item Number	F		
X	Source Code	F		
X	Distribution Plan	F		
X	Bibliographic Description	V		
X	Binding Code	F		
O	Binding Description	V	)	
O	Prepublication Price	F	)	Repeat if necessary
O	Publication Date	F	)	
O	Price	F	)	

RECORD CONTENT SHEET NO.134

Record: REQUISITION GUIDE RECORD **File:** T10
P1

X	Record ID	F		
X	Library System Number	F		
X	Item Number	F		
X	Bibliographic Description	V		
X	Binding	F	)	
O	Binding Description	V	)	
O	Prepublication Price	F	)	Repeat if necessary
O	Publication Date	F	)	
O	Price	F	)	

RECORD CONTENT SHEET NO.135

Record: REQUISITION WORKSHEET RECORD File: T10
R1

X	Record ID	F
X	Item Number	F
X	Bibliographic Description	V
X	Journal Code	F
X	Issue	V
X	Binding Code	F
O	Binding Description	V
O	Prepublication Price	F
O	Publication Date	F
O	Price	F

RECORD CONTENT SHEET NO.136

Record: ITEM INFORMATION WORKSHEET RECORD File: T10
R1

A copy of the Item Information Record is outputted from the Item Master Run with a changed Record ID, for printing. See Record Content Sheet No.128.

RECORD CONTENT SHEET NO.137

Record: ITEM NUMBER ERROR REPORT RECORD File: T10
P1

X	Record ID	F
X	Error Code	F
X	Description of cause for Rejection	V
X	Copy of Input Record	V

RECORD CONTENT SHEET NO.138

Record: ITEM MASTER FILE AUDIT REPORT RECORD
File: T10
P 1

X	Record ID	F
X	Item Number	F
X	Activity Code *	F
O	Copy of Item Master Record after change	V
O	Prior contents of fields affected by change	V

* Activity Code - Addition, change, or deletion

RECORD CONTENT SHEET NO.139

Record: NON-PROCESSED ACTIVITY RECORD File : T10
P 1

X	Record ID	F
X	Item Number	F
X	Non-Processed Code	F
X	Input Record not processed	V

RECORD CONTENT SHEET NO.140

Record: RECEIVING SET PRINT RECORD File: T10, T11, T12, T13V
P3

X	Record ID	F	
X	Order Number	F	
X	Partial Order Suffix	F	
X	Item Number	F	
X	Binding Code	F	
X	Bibliographic Description	V	
X	Library Code	F	) Repeat
X	Quantity on order	F	)

RECORD CONTENT SHEET NO.141

Record: ORDER GENERATION RECORD File: T10, T11

X	Record ID	F	
X	Supplier Number	F	
X	Order Generation Number	F	
X	Item Number	F	
X	Binding Code	F	
X	Bibliographic Description	F	
X	Library Number	F	) Repeat
X	Quantity Ordered	F	)
X	Price	F	

Order Generation Number

X	Cycle Number	F
X	Preparation Center	F
X	Order Set Suffix *	F
X	Date	F

* Assigned

RECORD CONTENT SHEET NO.142

Record: ORDER LINE RECORD File: ORDER MASTER

X	Supplier Number	F	Order Line Number
X	Record ID	F	
X	Order Number	F	
X	Item Number	F	
X	Binding Code	F	
X	Bibliographic Description	V	
X	Date ***	F	
X	Library Code	F	Repeat for each library
X	Quantity Ordered	F	
X	Quantity Received (repeat if necessary)	F	
X	Quantity Shipped	F	
X	Quantity Billed	F	
O	Invoice Number+	F	Repeat for each invoice
O	Quantity Invoiced	F	
O	Quantity Allocated++	F	
O	Quantity Priced	F	
O	Unit Price*	F	
O	Validly Vouchered Code**	F	

+ Invoice number length will vary with supplier. It is suggested that it be defined in this system as a fixed field of a length sufficient to contain the longest number.

++ To allow payment for invoices as items are received the received items will be allocated to invoices up to the invoiced quantity.

* The unit price on an invoice is not recycled from the Invoice File to the Order File until the invoice is approved.

** This is a binary code. A flag in this field indicates that the invoice has been, or definitely will be, paid.

*** If there is an unusual delay anticipated before receipt of the item, it is reflected in the date. Otherwise, the date is the cycle number the record was created plus SP P 11.

FIELD DERIVATION

File Name: ORDER MASTER Record Name: ORDER LINE RECORD

Content Sheet No. 142

Supplier Number

Transcribed from the Order Generation Record

Order Number

The Order Number consists of the following subfields:

Cycle Number - Transcribed from Order Generation Record

Processing Center - " " " " "

Order Set Number - " " " " "

Sequential Order Number - This is a sequentially assigned number, initially zero at the start of each Order Master File run, assigned to each P12 or less item numbers which have the same Order Set Number. Each time P12 item numbers are ordered or the Order Set Number changes the Sequential Order Number is incremented by one.

Item Number, Binding Code, Bibliographic Description, Date, Library Code, Quantity Ordered

Transcribed from the Order Generation Record.

Quantity Received

Initially zero. Incremented each time a completed Receiving Worksheet is entered. If the Worksheet is marked as a total receipt the Quantity Received field is incremented by the Quantity Ordered field. If the Worksheet is for a partially received Order Line the allocation of the order is indicated on the Worksheet and each Library is incremented by the amount stated. When a completed Receiving Worksheet for a partial order receipt is entered it triggers the production of a new Receiving Set for the remainder of the Order Line. This Receiving Set has a special suffix which is repeated on the Process Completion Card. This allows the system to match process completions to the appropriate Library for Shipping Papers and billing. Subsequent Receiving Worksheets cause separate Quantity Received fields to be created. When all shipments are made the fields can be consolidated.

Quantity Shipped

Initially zero. Incremented each time a Process Completion Card is entered. On completely received orders the Quantity Shipped is equal to the Quantity Received for a Library. On a partially received order the Quantity Shipped is related to the appropriate Quantity Received fields by the suffix on the Process Completion Card.

Invoice Number, Quantity Invoiced

Transcribed from the recycled Invoice Information Record.

Quantity Allocated

When the Order Line Record has been updated a check is made of the total Quantity Received and the total Quantity Allocated fields. If the Quantity Received total is greater than the Quantity Allocated total, Invoice Quantities are allocated up to the amount of the Quantity Received.

When the Quantity Allocated field for an Invoice Number is modified the information is sent forward to the Invoice Master File via a Receiving (Invoice) Record.

Unit Price

When an Invoice is approved a recycling Invoice Information Record is generated giving the Unit Price of the Item. The presence of this field indicates that the price may be used for billing libraries.

Quantity Billed, Quantity Priced

When the record has been updated by all inputs the following fields are totaled:

a) Quantity Shipped
b) Quantity Billed
c) Quantity Allocated for Approved Invoices
d) Quantity Priced

If total a) is greater than total b) and total c) is greater than total d), an assignment of unit prices to shipped items can take place for Library billing. The number of items that may be assigned a unit price is the smaller of the differences between total a) and total b) or total c) and total d). See the example below:

Example

Library	Qty Shipped	Qty Billed	Invoice	Qty Alloc.	Qty Priced	Unit Price
A	5	5	123	15	10	2.00
B	15	5	124	10	0	2.25
C	30	0	245*	5	0	0
			289	5	0	2.15

*** This Quantity Allocated is not included in total since it is not approved (no unit price)**

Qty Shipped - Qty Billed = 50 - 10 = 40

Qty Alloc* - Qty Priced = 30 - 10 = 20

A total of 20 items may be billed to the Libraries as follows:

Library	Quantity	Price
B	5	2.00
B	5	2.25
C	5	2.25
C	5	2.15

The Order Line Record then appears as follows:

Library	Qty Shipped	Qty Billed	Invoice	Qty Alloc.	Qty Priced	Unit Price
A	5	5	123	15	15	2.00
B	15	15	124	10	10	2.25
C	30	10	245	5	0	0
			289	5	5	2.15

This scheme is somewhat complicated but allows the allocation of unit prices should they differ for a given Order.

Validly Vouchered Code

When an Invoice on the Invoice Master has been placed on a Voucher and a Validated Voucher has been reentered a Voucher Information Record is recycled to the Order Master File.

RECORD CONTENT SHEET NO.143

Record: PURCHASE ORDER RECORD **File:** T12, T13V
P3

X	Record ID	F
X	Supplier Number	F
X	Order Number	F
X	Item Number	F
X	Binding Code	F
X	Bibliographic Description	V
X	Price	F
X	Quantity	F

RECORD CONTENT SHEET NO.144

Record: CANCELLATION LETTER PRINT RECORD File: T12, T13V
P 3

X	Record ID	F
X	Supplier Name	F
X	Supplier Address	F
X	Order Number	F
X	Item Number	F
X	Binding Code	F
X	Bibliographic Description	V
X	Number of Copies Cancelled	F

RECORD CONTENT SHEET NO.145

Record: SHIPPING PAPERS RECORD File: T12, T13L, P2

X	Record ID	F
X	Library Number	F
X	Item Number	F
X	Quantity Shipped	F

RECORD CONTENT SHEET NO.146

Record: OVERDUE ORDER REPORT RECORD File: T12, T13V
P3

When Operating Parameter C8 is non-zero a copy of the Order Line Record is outputted with a changed record ID if the date field plus System Parameter P11 is less than the current cycle number. See Record Content Sheet No.142.

RECORD CONTENT SHEET NO.147

Record: ORDER INFORMATION (LIBRARY) RECORD File: T12, T13L

X	Record ID	F	
X	Library Number	F	
X	Item Number	F	
X	Record Type	F	
O	Bibliographic Description	V	
O	Quantity Ordered	F	
O	Quantity Billable	F)	Repeat if necessary
O	Unit Price	F)	

RECORD CONTENT SHEET NO.148

Record: INVOICE MASTER RECORD File: INVOICE MASTER FILE

X	Supplier Number	F	
X	Invoice Number	F	
X	Order Number	F	
X	Processing Codes*	F	
X	Item Number**	F)	
X	Binding Code**	F)	
X	Bibliographic Description	V)	
X	Quantity Invoiced	F)	Repeat for each line of invoice
X	Quantity Allocated	F)	
X	Unit Price	F)	
X	Total**	F)	
X	Order Line Data	V)	
X	Invoice total	F	
X	Voucher Number	F	

Order Line Data

X	Quantity Ordered	F	
X	Quantity Received	F	
X	Invoice Number	F)	
X	Quantity Invoiced	F)	Repeat for each invoice
X	Quantity Allocated	F)	

* Processing codes indicate the following conditions:

a) The invoice has been approved.
b) The invoice has been listed on a voucher.
c) The invoice has been vouchered and the voucher has been approved for payment.
d) The validated voucher has been paid
e) The validated voucher has appeared on a reconciliation report

** Certain lines of an invoice represent charges and credits not billable to the library, such as transportation costs and special discounts accrueable to the State Center. The Item Number - Binding Fields above will have instead the following structure:

X	Charge/Credit Code	F
X	Separator (blank)	F
O	Percentage	F

In addition, the total will reflect the amount of the charge or credit.

FIELD DERIVATION

File Name: INVOICE MASTER **Record Name:** INVOICE MASTER

Content Sheet No. 148

Supplier Number, Invoice Number

Transcribed from the input Invoice Record.

Order Number, Item Number, Binding Code

Transcribed from input Invoice Record.

Bibliographic Description

When the Invoice Record is passed through the Order Master File run a match on Order Number - Item Number - Binding Code causes the Bibliographic Description field to be extracted onto the output Invoice Record. If there is no match this field is left blank to indicate that the Invoice line is in error.

Quantity Invoiced, Unit Price, Total, Invoice Total

Transcribed from the input Invoice Record. Totals for lines are checked as is the Invoice Total. Errors are flagged.

Quantity Allocated

Transcribed from the input Receiving (Invoice) Record generated in the Order Master File run.

Order Line Data

Originally transcribed from the Invoice Record modified by the Receiving (Invoice) Record generated in the Order Master File run. Used when Printing Invoice Worksheets.

Charge/Credit Code, Percentage

Transcribed from Invoice Record. The input Invoice Record may have the following codes:

91	Discount on Order Line
92	Transportation Charges
93	Special State Center Discount
94	Other Charges
95	Other Discounts

Discounts on Order Lines are applied to the Unit Price to allow proper billing to Libraries. All other credits and charges are considered State System expenses or income.

Processing Codes

Processing Codes indicate the status of the Invoice. The following codes are kept:

a) Invoice approved - this indicator is turned on by a completed Invoice Worksheet.

b) Invoice Vouchered - when Operating Parameter C9 is non-zero those Invoices that have been approved are assigned a Voucher Number and this indicator is turned on.

c) Invoice Vouchered and Validated - the returned Validated Voucher is approved completely or approved by Invoice. Either approval causes this indicator to be turned on. When Operating Parameter C10 is non-zero a Check is issued for the Invoices thus marked and they are deleted from the file.

If a Voucher is approved or rejected totally only the Supplier Number - Voucher Number is inputted. The approved Voucher Numbers are read into memory (up to a limit - System Parameter P14) and each Invoice Master and Account Adjustment Record Voucher Number is compared to this table.

When parts of a Voucher are approved each Invoice Number and Supplier Account Adjustment Number is inputted with a code for approval or rejection and these records are applied by invoice number.

d) When Operating Parameter C10 is non-zero this flag is turned on if the Voucher is being paid.

e) When Operating Parameter C12 is non-zero this flag is turned on if this is a Validated Voucher.

Voucher Number

When Operating Parameter C9 is non-zero Invoices which are approved and Supplier Account Adjustments will be grouped into Vouchers. A Voucher Number is assigned to each P13 Approved Invoice Master Record. The user has the option of approving the entire Voucher, approving certain Invoices and Account Adjustments on a Voucher, or rejecting the entire Voucher. The Voucher Number assigned here is for machine manipulation only and does not correspond to the final output Voucher - Check produced for all validly vouchered Invoices when Operating Parameter C10 is non-zero

Completed Invoice Worksheets may make corrections to the following fields:

Item Number
Binding Code
Quantity Invoiced
Unit Price
Charge/Credit Code
Percentage

Any other corrections require deletion and reentry of the Invoice. Note that the Invoice Record on file should reflect the actual Invoice and corrections to the file should be for the purpose of correcting an error in the file record. Invoices from the Supplier are either accepted or rejected, they are not modified.

RECORD CONTENT SHEET NO.149

Record: SUPPLIER ACCOUNT RECORD **File:** INVOICE MASTER

X	Supplier Number	F		
X	Record ID	F		
X	Period of Payment	F	)	Repeat if necessary
X	Payment Amount	F	)	

RECORD CONTENT SHEET NO.150

Record: LIBRARY ORDER RECORD File: LIBRARY ORDER FILE

X	Library Number	F		
X	Record ID	F		
X	Item Number	F		
X	Bibliographic Description	V		
X	Quantity Ordered	F		
X	Quantity Shipped	F		
X	Quantity Billable	F	)	
X	Unit Price	F	)	Repeat if necessary
X	Billed Indicator	F	)	
X	Reconciled Indicator	F	)	

FIELD DERIVATION

File Name: LIBRARY ORDER FILE **Record Name:** LIBRARY ORDER RECORD

Content Sheet No. 150

Library Number, Record ID, Item Number, Bibliographic Description, Quantity Ordered

Transcribed from each new Order Information (Library) Record generated in the Order Master run.

Quantity Shipped

Updated by the Shipping Paper Record generated in the Order Master run.

Quantity Billable, Unit Price

Updated by the Order Information (Library) Record generated in the Order Master run.

Billed Indicator

When Operating Parameter C11 is non-zero all billable amounts which do not have a Billed Indicator are billed to the library and the Indicator is turned on.

Example

	Qty Ord.	Qty Shipped	Billed Indicator	Billable	Unit Price
Library Order Before Billing	10	8	0	1	2.00
			0	1	2.25
			0	3	2.15
Library Order After Billing			1	1	2.00
			1	1	2.25
	10	8	1	3	2.15

Library Bill = 1 @ 2.00
1 @ 2.25
3 @ 2.15

Reconciled Indicator

When Operating Parameter C12 is non-zero this indicator is turned on and the fields are used for the Reconciliation Report.

RECORD CONTENT SHEET NO.151

Record: LIBRARY ACCOUNT RECORD File: LIBRARY MASTER FILE

During Month:

X	Library Number	F	
X	Record ID	F	
X	Payment Date	F	) Repeat if necessary
X	Amount of Library Payment	F	)
X	Previous Month Balance	F	

Output Record When Operating Parameter C11 is Non-Zero:

X	Library Number	F
X	Record ID	F
X	Previous Month Balance	F

New previous month balance = Old previous month balance + Amount Billed this month - Total library payment

RECORD CONTENT SHEET NO.152

Record: RECONCILIATION REPORT ORDER RECORD File: T12, T13V
P3

X	Record ID	F
X	Order Number	F
X	Item Number	F
X	Total Billed Dollar Amount	F
X	Total Validly Vouchered Dollar Amount	F

RECORD CONTENT SHEET NO.153

Record: RECONCILIATION REPORT PAYMENT RECORD File: P3

X	Record ID	F
X	Supplier Number	F
X	Totals (16)	F

Total dollar amount given for each combination of three criteria shown below:

Criteria 1:

Validly Vouchered Invoice - Net Invoice Amount
Validly Vouchered Invoice - Amount of non-billable charges
Validly Vouchered Invoice - Amount of non-billable credits
Validly Vouchered Account Adjustment

Criteria 2:

Payment Not Made
Payment Made

Criteria 3:

Not included on Previous Reconciliation
Included on Previous Reconciliation

RECORD CONTENT SHEET NO.154

Record: RECONCILIATION REPORT BILLING RECORD File: P2

X	Record ID	F
X	Library Number	F
X	Total (4)	F

Total dollar amount given for each combination of two criteria shown below:

Criteria 1:

Amount Billed to Library
Amount Billable but not yet billed to Library

Criteria 2:

Amount Counted in Previous Reconciliation
Amount not counted in Previous Reconciliation

SYSTEM PARAMETERS

P 1	Number of basic cycles a Bibliographic Record and Alpha Record are kept in file.
P 4	Number of basic cycles a Catalog Item Record is kept on the current Item Master File before it enters the supplement.
P 5	The number of basic cycles lag time before certain changes to an Item Master File record become effective.
P 6	Number of basic cycles a type 1 Cross-Reference record remains on Item Master File before it is deleted.
P 9	Number of basic cycles a Special Requisition or Acquisition is held on the Bibliographic File before a reminder is issued to approve or change item number.
P 10	Batch size for a given item on a Purchase Order to Supplier. This allows the State Center to control the batch size at Preparation Centers for optimum processing since Suppliers will be expected to ship by Purchase Order.
P 11	Number of basic cycles allowed for shipment before an item is considered overdue from the Supplier.
P 12	Number of Item Lines on a Purchase Order
P 13	Number of Invoices on a Voucher
P 14	Number of Voucher Numbers held in memory for a given Supplier in the Invoice Master File run.

OPERATING PARAMETERS

C 1	Basic Cycle Number
C 3	IMF Supplement Cycle Number
C 4	IMF Main Cycle Number
C 5	Catalog Supplement Cycle Number
C 6	Catalog Main Cycle Number
C 7	Error Reminder List
C 8	Overdue Order Report
C 9	Vouchers
C 10	Checks
C 11	Library Bill
C 12	Reconciliation

For Parameters C 3 thru C 12 the value is zero if the option is not being run.